

WHAT IS CLAIMED IS:

1. A powered clamp assembly comprising
an actuator;
a cam member having a camming surface;
wherein the cam member is driven by the actuator;
at least one jaw arm pivotable about an axis;
a bearing member attached to the jaw arm;
wherein the bearing member is engagable with the camming
surface of the cam member; and
wherein movement of the cam member causes the camming
surface to engage the bearing member causing the jaw arm to pivot.
2. The powered clamp assembly of Claim 1, wherein the cam
member is movable linearly, and the camming surface is arcuate to cause the jaw arm to
pivot.
3. The powered clamp assembly of Claim 1, further comprising a link
that movably couples the jaw arm to the cam member.
4. The powered clamp assembly of Claim 1, wherein the actuator is a
pneumatic actuator.
5. The powered clamp assembly of Claim 1, wherein the camming
surface of the cam member is located on the periphery thereof.
6. The powered clamp assembly of Claim 3, wherein the cam
member is movable in first and second directions, and wherein the camming surface of

the cam member moves the jaw arm in a third direction when the cam member is moved in a first direction; and wherein the link moves the jaw arm in a fourth direction when the cam member is moved in the first direction.

7. The powered clamp assembly of Claim 1, wherein the cam member is movable in first and second linearly reciprocal directions, and wherein the bearing member is a bushing that follows an arcuate cam path that displaces the bushing to cause the attached jaw arm to pivot.

8. The powered clamp assembly of Claim 6, wherein the link comprising a slot, and the jaw arm comprising a pin extending therefrom that is disposed in the slot to prevent interference between the link and the cam member when the cam member is moved in the first direction and provide engagement between the link and the cam member when the cam member is moved in the second direction.

9. A powered clamp assembly comprising:
a body;
an actuator;
a cam member having first and second camming surfaces;
wherein the cam member is driven by the actuator;
a first jaw arm pivotally mounted with respect to the body;
a second jaw arm pivotally mounted with respect to the body, and positioned opposite the first jaw arm;

 a first bearing member attached to the first jaw arm and engagable with the first bearing surface of the cam member; and

 a second bearing member attached to the second jaw arm and engagable with the second bearing surface of the cam member;

wherein movement of the cam member causes the first and second camming surfaces to engage the first and second bearing members, respectively, to cause the first and second bearing members to move to cause the first and second jaw arms to move.

10. The powered clamp assembly of Claim 9, wherein the cam member is movable linearly, and the first and second jaw arms are movable pivotally.

11. The powered clamp assembly of Claim 9, further comprising a first link that movably couples the first jaw arm to the cam member, and a second link that movably couples the second jaw arm to the cam member.

12. The powered clamp assembly of Claim 9, wherein the actuator is a pneumatic actuator.

13. The powered clamp assembly of Claim 9, wherein the first and second camming surfaces of the cam member are located on the periphery thereof.

14. The powered clamp assembly of Claim 11, wherein the cam member is movable in a first direction, and wherein the first and second camming surfaces of the cam members engage the first and second bearing members, respectively, to move the first and second jaw arms, respectively, to a closed position.

15. The powered clamp assembly of Claim 14, wherein when the cam member is movable in a second direction, and wherein the first and second links move the first and second jaw arms to an open position.

16. The powered clamp assembly of Claim 9, wherein the first and second bearing members are first and second bushing members, respectively, each

following arcuate cam paths of first and second camming surfaces, respectively, such that the first and second bushings are displaced to cause the first and second jaw arms to pivot.

17. The powered clamp assembly of Claim 15, wherein the first and second links each comprise a slot, and the first and second jaw arms each comprise a pin extending therefrom, respectively, wherein the pin extending from the first jaw arm is disposed in the slot of the first link, and wherein the pin extending from the second jaw arm is disposed in the slot of the second link, so as to prevent interference between the first and second links and the cam member when the cam member is moved in the first direction, and provide engagement between the first and second links and the cam member when the cam member is moved in the second direction.

18. The powered clamp assembly of Claim 9, wherein the cam member serves as a wedge between the first and second bearing members, moving the same apart and preventing a change in position until the cam member is moved.

19. A powered clamp assembly comprising:
an actuator;
a cam member having a camming surface disposed thereon;
wherein the cam member is driven by the actuator in first and second directions;
a link movably coupled to the cam member;
a jaw arm; and
a bearing member coupled to the jaw arm;
wherein the link is movably coupled to the jaw arm; and

wherein during movement of the cam member in the first direction, the camming surface engages the bearing to move the jaw arm.

20. The powered clamp assembly of Claim 19, wherein during movement of the cam member in the second direction, the link engages the pin to move the jaw arm.

21. The powered clamp assembly of Claim 19, wherein engagement of the bearing member by the cam member to move the arm only occurs during movement of the cam member in the first direction.

22. A powered clamp assembly having at least two jaw arms, one of which being pivotable with respect to the other at a pivot point, and an actuator, the powered clamp assembly further comprising:

a wedge that is coupled to the actuator for movement in first and second directions;

wherein the wedge engages the jaw arms at a location spaced apart from the pivot point to move at least one of the jaw arms about the pivot point.